UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,250	12/01/2003	Philip A. Wilsey	CLL-004	1934

32836 7590 06/27/2008

GUERIN & RODRIGUEZ, LLP
5 MOUNT ROYAL AVENUE
MOUNT ROYAL OFFICE PARK
MARLBOROUGH, MA 01752

EXAMINER	
WONG, ALLEN C	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
06/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/725,250	WILSEY ET AL.	
	Examiner	Art Unit	
	Allen Wong	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-12 and 14-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-12 and 14-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/26/08 have been fully read and considered but they are not persuasive.

Regarding lines 13-17 and 22-23 on page 9 of applicant's remarks, applicant states that Hara does not disclose pixels in the image sensor that can generate both video data responsive to light incident on the pixel from a respective portion of an image formed on the image sensor and a communications data signal responsive to an optical data signal incident on the pixel and emitted from an optical tag present in a corresponding part of the image. The examiner respectfully disagrees. The rejection must be evaluated on the basis of the combination of Hara and Lazo. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Hara's figure 1, element 1 is the sensor for receiving optical video data, wherein figure 2, Hara discloses the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11. See column 3, line 65 to column 4, line 8. In figure 1, Hara discloses that elements

6, 9 and 10 are interactively connected together for functioning as a data module wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1. In column 3, line 65 to column 4, line 17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data, which has a video data rate, is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data. Thus, Hara discloses a processor in communication with the imaging array and being adapted to provide video data at a video data rate and communications data in response to an image formed on the imaging array.

Hara does not specifically disclose emitted by an optical tag if the optical tag is present in the respective portion of the image, the optical data signal being modulated according to asset data for an asset associated with the optical tag, and being configured to provide asset data for an asset in response to a respective communications data signal. However, in column 3, lines 32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22. Thus, Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data. In column 3, line 41 to column 4, line 19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset. Thus, Lazo discloses that there is a sensor processor that generates asset data.

Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets, as disclosed in column 2, line 62 to column 3, line 17. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes, as suggested in Lazo's column 1, line 66 to column 2, line 3.

Regarding lines 14-18 on page 10 of applicant's remarks, applicant states that Lazo does not disclose the use of optical signals modulated with the asset data and repeats the above arguments that Hara's image sensor cannot provide the data in such modulated optical signals. The examiner respectfully disagrees. Hara's figure 1, element 1 is the sensor for receiving optical video data, wherein figure 2, Hara discloses the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11. See column 3, line 65 to column 4, line 8. In figure 1, Hara discloses that elements 6, 9 and 10 are interactively connected together for functioning as a data module wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1. In column 3,

line 65 to column 4, line 17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data, which has a video data rate, is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data. Thus, Hara discloses a processor in communication with the imaging array and being adapted to provide video data at a video data rate and communications data in response to an image formed on the imaging array.

Hara does not specifically disclose emitted by an optical tag if the optical tag is present in the respective portion of the image, the optical data signal being modulated according to asset data for an asset associated with the optical tag, and being configured to provide asset data for an asset in response to a respective communications data signal. However, in column 3, lines 32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22. Thus, Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data. In column 3, line 41 to column 4, line 19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset. Thus, Lazo discloses that there is a sensor processor that generates asset data.

Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets, as

disclosed in column 2, line 62 to column 3, line 17. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes, as suggested in Lazo's column 1, line 66 to column 2, line 3.

Regarding lines 19-21 on page 10 of applicant's remarks, applicant asserts that neither Hara nor Lazo, alone or in combination, do not teach or suggest the present invention as disclosed in claim 1. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes, as suggested by Lazo's column 1, line 66 to column 2, line 3.

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Similarly, claims 12, 19 and 26 are rejected for similar reasons as stated above and in the rejection below for claim 1. Claims 3-11, 14-18, 20-25, 27-33 and 36-40 are rejected for at least similar reasons as claims 1, 12, 19 and 26.

Regarding page 11 of applicant's remarks, applicant states that claims 34 and 35 are patentable for similar reasons as previously stated for claim 26. The examiner respectfully disagrees. Dependent claims 34-35 are rejected for at least similar reasons as stated for claim 26 over Hara and Lazo and in further in view of Monroe, wherein Monroe's column 25, lines 60-67 teaches that periodic monitoring can be applied for checking surveillance conditions. Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara, Lazo and Monroe, as a whole, for reducing bandwidth requirements and efficiently using minimal resources as needed, as suggested in Monroe's column 25, lines 56-60.

Thus, the rejection is maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-12, 14-33 and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (5,694,495) in view of Lazo (6,791,603).

Regarding claim 1, Hara discloses an optical asset tracking system comprising:

a sensor having a plurality of pixels, each pixel configured to generate video data responsive to light incident on the pixel from a respective portion of an image generated on the image sensor (fig.1, element 1 is the sensor for receiving optical video data, wherein fig.2 shows the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11; see col.3, ln.65 to col.4, ln.8); and

a sensor processor in communication with the sensor, the sensor processor configured to provide video data for the image generated on the image sensor (fig.1, elements 9, 10 and 6 are interactively connected together for functioning as a sensor processor wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1; col.3, ln.65 to col.4, ln.17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data).

Hara discloses wherein each pixel is configured to provide a communications data signal in response to the optical data and incident on the pixel (fig.1, elements 9,

10 and 6 are interactively connected together for functioning as a sensor processor wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1; col.3, ln.65 to col.4, ln.17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data).

Hara does not specifically disclose emitted by an optical tag if the optical tag is present in the respective portion of the image, the optical data signal being modulated according to asset data for an asset associated with the optical tag, and being configured to provide asset data for an asset in response to a respective communications data signal. However, Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), and that there is a sensor processor that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would

have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 3, Hara discloses wherein the sensor and the sensor processor comprise an optical communications imager (fig.1, elements 9, 10 and 6 are interactively connected together for functioning as a data module wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1; col.3, ln.65 to col.4, ln.17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data).

Regarding claim 4, Hara does not specifically disclose the sensor comprises a digital video camera. However, Lazo discloses the use of a digital video camera (fig.2, element 24). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 5, Hara does not specifically disclose the use of analog video camera in communication with the frame grabber. Lazo discloses the use of the analog video camera in communication with the frame grabber (fig.2, element 24 is a camera inside element 12 of fig.1, where element 12 is in communication with elements 10, 2 and 6 for frame grabbing; col.2, ln.53-62, analog or digital recorders can be applied, thus analog video camera can be used). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 6, Hara does not specifically disclose an optical tag database in communication with the sensor processor, the optical tag database storing asset data for each of a plurality of optical tags. However, Lazo teaches the use of an asset database (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data

so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 7, Hara does not specifically disclose further comprising a tracking processor in communication with the sensor processor. However, Lazo teaches the use of a tracking processor is in communication with a video controller or processor (fig.1, element 10 and element 2 are processors or controllers in communication with one another). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 8, Hara does not specifically disclose wherein the sensor processor and the tracking processor are integrated as a single processor. However, Lazo teaches the use of a tracking processor is in communication with a video controller or processor (fig.1, element 10 and element 2 are processors or controllers in communication with one another). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 9, Hara does not specifically disclose the tracking processor comprises a host computer. However, Lazo discloses the tracking processor comprises a host computer (col.2, ln.58-61 and element 10 is a controller that can be used as a computer for tracking data). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 10, Hara does not specifically disclose wherein asset data comprise at least one of asset identification data, environmental data, medical data and status data. However, Lazo discloses wherein asset data comprise at least one of asset identification data, environmental data, medical data and status data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding identification data for each RFID tag 20 used to track the corresponding asset). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 11, Hara does not specifically disclose further comprising the plurality of optical tags, each of the optical tags configured for attachment to an asset. However, Lazo discloses the tracking of plural assets (col.2, ln.62-67 and col.3, ln.29-31, Lazo discloses the use of plural sensors for tracking of plural assets by using plural tags). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 12, Hara discloses a method for real-time location of an asset, the method comprising:

detecting, at a sensor comprising a plurality of pixels, the optical data signal at one or more of the pixels (fig.1, element 1 is the sensor for receiving optical video data, wherein fig.2 shows the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11; see col.3, ln.65 to col.4, ln.8).

Hara does not specifically disclose being modulated according to asset data for the asset, determining the real-time location of the asset according to which one of the pixels received the optical data signal and determining the asset data for the asset in response to the detected optical data signal. However, Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), and that there is a sensor processor that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 14, Hara does not specifically disclose further comprising detecting an interrogation signal at the optical tag and performing the step of emitting the optical data signal in response thereto. However, However, Lazo teaches the use

of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), and that there is a sensor processor that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 15, Hara does not specifically disclose further comprising: determining a value of an environmental parameter; comparing the value of the environmental parameter to a threshold value; and performing the step of emitting the optical data signal in response to the comparison. However, Lazo discloses the determining of a environmental parameter value (col.2, ln.64-67, Lazo discloses the use of motion sensor for detecting motion or infrared sensor for detecting heat or the environmental value); comparing the value of the environmental parameter to a

threshold value (col.2, ln.67-col.3, ln.17; Lazo discloses the use of a tracking controller or processor for checking for conditions to see if the event is triggered based on the obtained environmental value); and performing the step of response to the comparison (col.2, ln.67-col.3, ln.17, Lazo discloses the response in which the event is triggered after comparing the rules from the asset database 14). Lazo does not specifically disclose emitting the optical data. Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 16, Hara does not specifically disclose further comprising generating sensor data and wherein the asset data comprises the sensor data. Lazo discloses further comprising generating sensor data and wherein the asset data comprises the sensor data (col.2, ln.62-col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 17, Hara discloses further comprising generating processed sensor data (fig.1, element 1 is the sensor for receiving optical video data, wherein fig.2 shows the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11; see col.3, ln.65 to col.4, ln.8).

Regarding claim 18, Hara does not specifically disclose wherein the asset data comprises at least one of asset identification data, environmental data, medical data and status data. However, Lazo discloses wherein asset data comprise at least one of asset identification data, environmental data, medical data and status data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding identification data for each RFID tag 20 used to track the corresponding asset). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 19, Hara discloses an optical asset tracking system comprising:

a sensor having a plurality of pixels, each pixel configured to generate video data responsive to light incident on the pixel from a respective portion of the image

generated on the respective imaging sensor (fig.1, element 1 is the sensor for receiving optical video data, wherein fig.2 shows the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11; see col.3, ln.65 to col.4, ln.8); and

a sensor processor in communication with the sensor, the sensor processor configured to generate an electrical data signal representative of the optical data signal incident on each pixel (fig.1, elements 9, 10 and 6 are interactively connected together for functioning as a sensor processor wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1; col.3, ln.65 to col.4, ln.17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data).

Hara discloses wherein each pixel is configured to provide a communications data signal in response to the optical data and incident on the pixel (fig.1, elements 9, 10 and 6 are interactively connected together for functioning as a sensor processor wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1; col.3, ln.65 to col.4, ln.17, Hara discloses at element 9 that if the data does not exceed the threshold, then the video output data is not sent, but instead, the

optical communications data is sent to element 10 and then element 6 for sending a control data).

Hara does not specifically disclose configured to generate a communications data signal responsive to an optical data signal incident on the pixel and emitted by an optical tag if the optical tag is present in the respective portion of the image, the optical data signal being modulated according to asset data for an asset associated with the optical tag, and being configured to provide asset data for an asset in response to a respective communications data signal. However, Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), and that there is a sensor processor that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or

items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Although Hara does not specifically disclose the use of a plurality of sensors and a plurality of corresponding sensor processors, however, Lazo suggests the use of plural sensors (col.2, ln.62-67 and col.3, ln.29-31, Lazo discloses the use of plural sensors) and the use of plural sensor processors (col.4, ln.30-40, Lazo suggests the use of plural controllers and plural computers) to track assets. One of ordinary skill in the art can easily implement the multiplicity of sensors and sensor processors for permitting the convenient tracking of plural assets as necessary.

Regarding claim 20, Hara does not specifically disclose further comprising a tracking processor in communication with the sensor processors through a communications network. However, Lazo teaches the use of a tracking processor is in communication with a video controller or processor (fig.1, element 10 and element 2 are processors or controllers in communication with one another via a communication link). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 21, Hara does not specifically disclose further comprising a plurality of tracking processors, each of the tracking processors being in communication with a respective one of the sensor processors. Lazo suggests the use of plural sensors (col.2, ln.62-67 and col.3, ln.29-31, Lazo discloses the use of plural

sensors) and the use of plural sensor processors (col.4, ln.30-40, Lazo suggests the use of plural controllers and plural computers) to track assets. Therefore, one of ordinary skill in the art can obviously, easily implement the multiplicity of sensors and sensor processors for permitting the convenient tracking of plural assets as necessary.

Regarding claim 22, Hara does not specifically disclose further comprising an optical tag database in communication with the tracking processor, the optical tag database storing asset data for each of a plurality of optical tags. However, Lazo teaches the use of an asset database (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset, also element 10 is used in communication with the asset database 14). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 23, Hara does not specifically disclose wherein the tracking processor comprises a host computer. However, Lazo discloses the tracking processor

comprises a host computer (col.2, ln.58-61 and element 10 is a controller that can be used as a computer for tracking data). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 24, Hara does not specifically disclose wherein asset data comprise at least one of asset identification data, environmental data, medical data and status data. However, Lazo discloses wherein asset data comprise at least one of asset identification data, environmental data, medical data and status data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding identification data for each RFID tag 20 used to track the corresponding asset). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 25, Hara does not specifically disclose further comprising the plurality of optical tags, each of the optical tags configured for attachment to an asset. However, Lazo discloses the tracking of plural assets (col.2, ln.62-67 and col.3, ln.29-31, Lazo discloses the use of plural sensors for tracking of plural assets by using plural

tags). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 26, Hara discloses an optical tag for generating an optical data signal having asset data, comprising:

a sensor obtaining optical data (fig.1, element 1 is the sensor for receiving optical video data, wherein fig.2 shows the expansion of element 1 in that there is an array of optical detectors 13 for detecting the plurality of pixels of data, in that each pixel of data is detected by the plurality of optical detectors 13, and that when the data obtained exceeds the threshold, then the video output data is sent to the video module, element 11; see col.3, ln.65 to col.4, ln.8); and

a processor in electrical communication with the sensor and the memory module, the processor generating a data signal (fig.1, elements 9, 10 and 6 are interactively connected together for functioning as a sensor processor wherein the array 1 and scanner elements 2-4 are receiving optical communications data generated by at least one optical communications source in a field of view of the optical sensor 1; col.3, ln.65 to col.4, ln.17, Hara discloses at element 9 that if the data does not exceed the

threshold, then the video output data is not sent, but instead, the optical communications data is sent to element 10 and then element 6 for sending a control data, thus, the memory must exist to temporarily store the video data).

Hara does not specifically disclose a modulated optical signal comprising asset data, "optical tag", a memory module storing asset data for an asset to be tracked, communications data signal comprising the stored asset data, and an optical modulator in electrical communication with the tag processor and generating an optical data signal that is modulated in response to the communications data signal. However, Lazo teaches the use of RFID tags for generating data signal wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), a memory moducle storing asset data (col.3, ln.41-col.4, ln.19, Lazo discloses the asset database 14 for storing asset data), and that there is a "tag processor" that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical modulator for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical

tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claims 27-29, Hara does not specifically disclose the optical modulator comprises a light emitting diode, laser or a modulated reflector. However, Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), and that there is a sensor processor that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62-col.3, ln.17; Lazo discloses that other types of sensors can be used including infrared that includes laser or LEDs). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 30, Hara does not specifically disclose further comprising an environmental sensor in electrical communication with the tag processor. However, Lazo discloses the use of an environmental sensor in communication with the processor (col.2, ln.64-67, Lazo discloses the use of motion sensor for detecting motion or infrared sensor for detecting heat or the environmental value, where the sensor 12 of fig.1 can be in communication with the tracking controller or processor 10, in that the RFID tag does provide certain identification data). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 31, Hara does not specifically disclose further comprising a control circuit in electrical communication with the tag processor and the optical modulator, the control circuit providing a control signal responsive to the data signal. However, Lazo teaches the use of a tracking processor is in communication with a video controller or processor (fig.1, element 10 and element 2 are processors, controllers or control circuits in communication with one another). Lazo teaches the use of RFID tags wherein there are RFID sensors for detecting the RFID tags for tracking assets and providing asset data (col.3, ln.32-48, Lazo discloses that the assets can be tagged with RFID tags 20 with RFID reader 22), and that there is a sensor processor that generates asset data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID

tag 20, and accessing the asset database 14 for pulling out the corresponding data for each RFID tag 20 used to track the corresponding asset). Although Lazo does not specifically state optical tag for emitting optical data signal, however, Lazo does suggest that other types of sensors, ie. infrared sensors, optical sensors or another type of tracking sensors, can be used to track assets (col.2, ln.62- col.3, ln.17; Lazo discloses that other types of sensors can be used including infrared that includes laser or LEDs). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for replacing the optical tags instead of Lazo's RFID tags to track assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 32, Hara does not specifically disclose wherein the asset data comprise at least one of asset identification data, environmental data, medical data and status data. However, Lazo discloses wherein asset data comprise at least one of asset identification data, environmental data, medical data and status data (col.3, ln.41-col.4, ln.19, Lazo discloses that there are RFID reader 22 that read RFID tags 20 for obtaining asset data of each corresponding RFID tag 20, and accessing the asset database 14 for pulling out the corresponding identification data for each RFID tag 20 used to track the corresponding asset). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order

to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 33, Hara does not specifically disclose wherein the tag processor generates a clock signal to trigger broadcasts of asset data. However, Lazo discloses the triggering of broadcasting of asset data (col.3, ln.5-31, Lazo discloses the triggering of the asset data if the after checking with the event driven tracking controller 10 from zone sensor 12, other rules may be programmed since the application is flexible to determine the trigger of broadcast of asset data for providing a variety of desired actions as needed by authorized personnel or users). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 36, Hara does not specifically disclose further comprising a trigger sensor to detect an interrogation signal in communication with the tag processor, the control signal being responsive to the detection of the interrogation signal at the trigger sensor. However, Lazo discloses the triggering of broadcasting of asset data (col.3, ln.5-31, Lazo discloses the triggering of the asset data if the after checking with the event driven tracking controller 10 from zone sensor 12, other rules may be programmed since the application is flexible to determine the trigger of broadcast of asset data for providing a variety of desired actions as needed by authorized personnel or users) based on the interrogation signal in communication with tag processor

responsive to the detection of the trigger (fig.1, element 10 and element 2 are processors, controllers or control circuits in communication with one another, and in col.3, ln.5-31, Lazo discloses the trigger to set the video recording and broadcast of the asset is set when certain conditions from the predetermined rules are met). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 37, Hara does not specifically disclose wherein the trigger sensor is one of an optical sensor, an RF sensor, an acoustic sensor and an environmental sensor. However, Lazo discloses wherein the trigger sensor is one of an optical sensor, an RF sensor, an acoustic sensor and an environmental sensor (col.2, ln.62-67). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 38, Hara does not specifically disclose further comprising a switch in electrical communication with the processor, the control signal generated by the tag processor causing the optical modulator to initiate an on-demand broadcast of optical data in response to an activation of the switch. However, Lazo discloses the user initiated actions can be triggered including video tracking of assets (col.2, ln.67-col.3, ln.31, Lazo discloses that since the application is flexible and that user can

trigger desired actions for video tracking of objects can be implemented, thus, Lazo must disclose a switch for permitting the user initiation of "desired actions" to initiate the video tracking and broadcasting of optical data). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 39, Hara does not specifically disclose wherein the memory module is provided by an asset. However, Lazo teaches the storage of identification data on the asset tag (col.3, ln.41-col.4, ln.19, Lazo discloses the asset database 14 for storing asset data, in that of course, the RFID tag must disclose a memory module for storing the identification data of the asset for properly identifying the asset). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Regarding claim 40, Hara does not specifically disclose further comprising an interface module in communication with the tag processor. However, Lazo teaches that the interface module is in communication with the tag processor (col.3, ln.5-31, element 10 is the controller or processor in communication with the asset database 14 and that flexible programming for changing the rules or conditions can be adjusted by authorized personnel for interactively communicating with the event-driven tracking

controller 10, thus, the interactive module must be there for permitting the user to interactively communicating with the event-driven tracking controller 10). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara and Lazo, as a whole, for tracking assets data so as to accurately, precisely track assets, people or items, in order to keep track of these assets from being lost or taken, and for security purposes (Lazo col.1, ln.66-col.2, ln.3).

Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (5,694,495) and Lazo (6,791,603) in view of Monroe (7,131,136).

Regarding claim 34, Hara and Lazo do not specifically disclose wherein the control signal generated by the tag processor is periodic. Monroe teaches that periodic monitoring can be applied for checking surveillance conditions (col.25, ln.60-67). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara, Lazo and Monroe, as a whole, for reducing bandwidth requirements and efficiently using minimal resources as needed (Monroe col.25, ln.56-60).

Regarding claim 35, Hara and Lazo do not specifically disclose wherein the control signal generated by the tag processor is continuous. However, Monroe teaches that continuous monitoring can be applied for checking surveillance conditions (col.28, ln.56-60). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hara, Lazo and Monroe, as a whole, for continuously checking the surveillance data of the monitored area so as to accurately and precisely obtain the details of every moment of the monitored scene for effectively determining the cause(s) of the emergency or critical situation at hand (Monroe col.7, ln.40-45).

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allen Wong/
Primary Examiner, Art Unit 2621

/Allen Wong/
Primary Examiner
Art Unit 2621

AW
6/28/08